Thomas Schumann Water Risk Index™ EURO 50

Research suggests that nearly a third of the world is subject to water stress, a burgeoning crisis that only promises to get worse as climate change exacerbates droughts and flooding, and as population growth fuels ever-growing water demands for consumption, agriculture, and other human activities. The effects that changes in access to water will have on businesses will be nothing short of transformational to the global economy, creating winners (those that manage water well) and losers (those that mismanage water resources) -- and in turn, creating significant new investment opportunities. Forward-looking investors can realize significant returns while contributing to global water sustainability by pricing water risk into financial securities, and investing in companies that demonstrate good water stewardship.

Thomas Schumann Water Risk Index™ EURO 50 is the first of its kind index for the European territory that prices the top 50 financial securities in the Euro Zone according to their exposure to water risk.

**FEATURES**

- The Top 50 publicly listed Euro zone companies by Free Float Adjusted Market Cap who have an ADTV of €1 Million or more, weighted by Adjusted waterBeta®
- WaterBeta® algorithms from Equarius Risk Analytics calculates excess price volatility from asset level water risk using AI/ML models which link financial and facility level data to enable investments for corporate climate transitioning.
- Diverse index with a fair representation from 10 Industry sectors led by Financials & Consumer Goods, and 7 Eurozone countries led by France & Germany

**KEY FACTS**

- Review & Rebalancing – Annually (Dec)
- Buffer Zone – 61:40
- Weighting – Adj. Beta = 1 + Max (Combined Beta, 0) where Combined Beta = Beta/(Beta + waterBeta®)
- Number of Constituents – 50
- Cap Factor – 10% (Constituents)
- Base Date – 31st Dec 2009
- Base Value – 1000
- Total Return index – Available
- Currency – EUR
- Index Ticker – TSWRIEUR

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### SECTOR WEIGHTS

<table>
<thead>
<tr>
<th>INDUSTRY</th>
<th>CONSTITUENTS</th>
<th>WEIGHT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financials</td>
<td>11</td>
<td>22.53%</td>
</tr>
<tr>
<td>Consumer Goods</td>
<td>11</td>
<td>21.53%</td>
</tr>
<tr>
<td>Industrials</td>
<td>7</td>
<td>14.01%</td>
</tr>
<tr>
<td>Health Care</td>
<td>5</td>
<td>10.01%</td>
</tr>
<tr>
<td>Basic Materials</td>
<td>4</td>
<td>7.81%</td>
</tr>
<tr>
<td>Telecommunications</td>
<td>3</td>
<td>6.14%</td>
</tr>
<tr>
<td>Oil &amp; Gas</td>
<td>3</td>
<td>6.03%</td>
</tr>
<tr>
<td>Utilities</td>
<td>3</td>
<td>5.83%</td>
</tr>
<tr>
<td>Technology</td>
<td>2</td>
<td>4.05%</td>
</tr>
<tr>
<td>Consumer Services</td>
<td>1</td>
<td>2.05%</td>
</tr>
</tbody>
</table>

### COUNTRY WEIGHTS

<table>
<thead>
<tr>
<th>COUNTRY</th>
<th>CONSTITUENTS</th>
<th>WEIGHT</th>
</tr>
</thead>
<tbody>
<tr>
<td>France</td>
<td>18</td>
<td>35.93%</td>
</tr>
<tr>
<td>Germany</td>
<td>13</td>
<td>25.76%</td>
</tr>
<tr>
<td>Spain</td>
<td>7</td>
<td>14.22%</td>
</tr>
<tr>
<td>Italy</td>
<td>5</td>
<td>10.13%</td>
</tr>
<tr>
<td>Netherlands</td>
<td>5</td>
<td>9.94%</td>
</tr>
<tr>
<td>Belgium</td>
<td>1</td>
<td>2.03%</td>
</tr>
<tr>
<td>Ireland</td>
<td>1</td>
<td>1.98%</td>
</tr>
</tbody>
</table>

### TOP 10 CONSTITUENTS

<table>
<thead>
<tr>
<th>TICKER</th>
<th>EXCHANGE</th>
<th>COMPANY NAME</th>
<th>INDUSTRY</th>
<th>MARKET CAP (£ BILLION)</th>
<th>WEIGHT</th>
</tr>
</thead>
<tbody>
<tr>
<td>FRE-DE</td>
<td>Xetra - ETR</td>
<td>Fresenius SE &amp; Co. KGaA</td>
<td>Health Care</td>
<td>27.96</td>
<td>2.0509%</td>
</tr>
<tr>
<td>GLE-FR</td>
<td>Euronext Paris - PAR</td>
<td>Societe Generale S.A. Class A</td>
<td>Financials</td>
<td>26.47</td>
<td>2.0492%</td>
</tr>
<tr>
<td>ISP-IT</td>
<td>Milan - MIL</td>
<td>Intesa Sanpaolo S.p.A.</td>
<td>Financials</td>
<td>41.12</td>
<td>2.0489%</td>
</tr>
<tr>
<td>VIV-FR</td>
<td>Euronext Paris - PAR</td>
<td>Vivendi SA</td>
<td>Consumer Services</td>
<td>30.56</td>
<td>2.0487%</td>
</tr>
<tr>
<td>BNP-FR</td>
<td>Euronext Paris - PAR</td>
<td>BNP Paribas SA Class A</td>
<td>Financials</td>
<td>66.03</td>
<td>2.0486%</td>
</tr>
<tr>
<td>G-IT</td>
<td>Milan - MIL</td>
<td>Assicurazioni Generali S.p.A.</td>
<td>Financials</td>
<td>28.88</td>
<td>2.0482%</td>
</tr>
<tr>
<td>INGA-NL</td>
<td>Euronext Amsterdam - AMS</td>
<td>ING Groep NV</td>
<td>Financials</td>
<td>41.65</td>
<td>2.0482%</td>
</tr>
<tr>
<td>MUV2-DE</td>
<td>Xetra - ETR</td>
<td>Munich Reinsurance Company</td>
<td>Financials</td>
<td>37.96</td>
<td>2.0482%</td>
</tr>
<tr>
<td>BBVA-ES</td>
<td>Madrid - MCE</td>
<td>Banco Bilbao Vizcaya Argentaria, S.A.</td>
<td>Financials</td>
<td>33.23</td>
<td>2.0481%</td>
</tr>
<tr>
<td>SAN-ES</td>
<td>Madrid - MCE</td>
<td>Banco Santander S.A.</td>
<td>Financials</td>
<td>61.99</td>
<td>2.0481%</td>
</tr>
</tbody>
</table>
Thomas Schumann Water Risk Index™
EURO 50
Methodology Document
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1. Introduction

Nearly a third of the world is subject to water stress, a burgeoning crisis that only promises to get worse as climate change exacerbates droughts and flooding, and as population growth fuels ever-growing water demands for consumption, agriculture, and other human activities. The effects that changes in access to water will have on businesses will be nothing short of transformational to the global economy, creating winners (those that manage water well) and losers (those that mismanage water resources) -- and in turn, creating significant new investment opportunities. Forward-looking investors can realize significant returns while contributing to global water sustainability by pricing water risk into financial securities, and investing in companies that demonstrate good water stewardship. Increasingly investors use water risk as a proxy for climate risk.

Thomas Schumann Water Risk Index™ EURO 50 is the first of its kind index for the European territory that prices the top 50 financial securities in the Euro Zone according to their exposure to water risk.

The water risk is calculated by using the waterBeta® technology from Equarius® Risk Analytics that delivers asset-level, data-driven risk analyses and probabilistic water risk predictions using AI/ML models which link financial and facility level data to enable investments for corporate climate transitioning. The waterBeta® is an idiosyncratic volatility metric resulting from the impact of water risk exposures on share price behaviour relative to sector-specific industry benchmarks.

2. Universe and Eligibility

2.1 Universe

We start with the stocks which are listed in the major exchanges of the Euro Zone countries** and have an Average Daily Turnover of 1 Million EUR or more for the last quarter.

Then the stocks are segmented into 37 RBICS sectors and ranked by Free Float Market Capitalization.

The largest stocks are then added from each of the RBICS sector segments to the selection list till the coverage is less than or equal to 60% of the free float market capitalization of the corresponding RBICS sector.
**The stocks listed in the following exchanges were considered to be a part of the Index:

<table>
<thead>
<tr>
<th>EURONEXT Brussels (BE)</th>
<th>Deutsche Boerse (DE)</th>
<th>Irish Stock Exchange (IE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EURONEXT Amsterdam (NL)</td>
<td>Vienna Stock Exchange (AT)</td>
<td>NASDAQ OMX Helsinki (FI)</td>
</tr>
<tr>
<td>EURONEXT Lisbon (PT)</td>
<td>Borsa Italiana (IT)</td>
<td></td>
</tr>
<tr>
<td>EURONEXT Paris (FR)</td>
<td>Bolsa De Madrid (ES)</td>
<td></td>
</tr>
</tbody>
</table>

2.2 Eligibility

2.2.1 waterBeta® Requirement

The absolute value of the waterBeta® value as provided by Equarius Risk Analytics must be greater than zero (0). The calculations are based on quarterly data relative to sector benchmarks.

3. Number of Constituents

The constituent number is fixed at 50 companies. If there are any additions (e.g. fast entry) or deletions (e.g. delisting) between two index reviews, deletions or additions will be made in order to keep the number constituent companies in the index at 50.

3.1 Constituent Capping

No individual constituent is allowed to have a weight greater than ten percent in the Index.

4. Ranking and Weighting

4.1 Ranking Criterion

The eligible companies are rank ordered using Free Float Adjusted Market Cap – i.e. the company with the highest Free Float Adjusted Market Cap will be considered for the topmost rank.

4.2 Weighting Criterion

The Index is weighted by adjusted beta, capturing systemic and idiosyncratic volatility.

\[
\text{Adjusted Beta} = 1 + \text{Max} (\text{Combined Beta}, 0) \text{ where} \\
\text{Combined Beta} = \frac{\text{Beta}}{\text{Beta} + \text{waterBeta}^\circledast}
\]

Here, Beta is calculated with respect to EURO STOXX 50®
5. Regular Annual Review

5.1 Data Cut-off

Fuzzy Logix undertakes regular annual reviews of Index constituents with data cut-off dates of the last trading day of December each year.

5.2 Buffer Zone

In order to minimize the frequency of the constituent turnovers, buffer zones are applied.

5.2.1 Additions

Non-constituent companies ranked 40 or below will be included in the index.

5.2.2 Deletions

Existing constituent companies ranked above 60 will be removed from the Index.

5.4 Effective Dates

Effective dates of constituent changes will be the next trading day after the first Friday of March. If that Friday falls on a public holiday, it will be postponed to the next Friday, subject to the final decision made by the Index committee. Under normal circumstances, five trading days’ notice will be given for any constituent changes made before the effective date.
6. Index Rebalancing

The Index is rebalanced quarterly and implemented after market close on the last Friday of the last month of the quarter and comes into effect on the next trading day.

7. Index Calculation and Dissemination

7.1 Schedule

The Index is calculated and disseminated real-time every 15 seconds during trading hours on each trading day.

7.2. Currency

The Index is calculated and published in EURO.

8. Base Date and History Availability

Thomas Schumann Water Risk Index™ EURO 50 base date is 31st December 2009 with a base value of 1000.

9. Contact Information

Fuzzy Logix Inc.

Address: 10735 David Taylor Drive, Suite 130, Charlotte, NC 28262

Website: www.fuzzylogix.com

E-mail: contact.usa@fuzzylogix.com
11. Disclaimer

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